STATEMENT OF BASIS
Anniston Army Depot
Anniston, AL
Calhoun County
(301-0023)

This proposed Title V Major Source Operating Permit (MSOP) renewal is issued under the provisions of ADEM Admin. Code R. 335-3-16. The above named applicant has requested authorization to perform the work or operate the facility shown on the application and drawings, plans and other documents attached hereto or on file with the Air Division of the Alabama Department of Environmental Management, in accordance with the terms and conditions of this permit.

The significant sources of air pollutants at Anniston Army Depot (ANAD) include fuel oil and natural gas fired boilers, engine testing, electroplating, woodworking operations, fuel storage tanks, surface coating operations, open burning/open detonation, NPX vats, vapor degreasing, and abrasive blasting operations.

This facility is manned 8760 hours per year. ANAD is major for particulate matter, volatile organic compounds, nitrogen oxides, sulfur dioxide, carbon monoxide, and hazardous air pollutants.

This Title V Major Source Operating Permit renewal will also incorporate equipment covered by Air Permits into the Major Source Operating Permit (MSOP) that have been issued to ANAD since the last issuance. The Air Permits that are being incorporated into the Title V are the following:

X031	Two (2) NPX Paint Stripping Vats (Building 130)
X039	NPX Paint Stripper Vat located at the Power Train Rebuild/Test Facility
X040	Walk-in Abrasive Blast with Baghouse at the Power Train Rebuild/Test Facility
X042	Two Paint Booths with Dry Filters at the Power Train Rebuild/Test Facility
X043	Seven Engine Test Cells located at the Power Train Rebuild/Test Facility
X044	Two Boilers (2.51 MMBtu/hr, each) located at the Power Train Rebuild/Test
X045	Two Salt Baths with common Scrubber at the Power Train Rebuild/Test Facility
X046	Paint Booth No. 4 with Dry Filter System (Building 433)
X047	Five Turbine Engine Test Cell Stands near Building 128
X049	Scrap Metal Flashing Furnace
X050	Test Cell #2 located at Building 410
X051	DRMO Mobile Shredder
X052	Building 128 Turbine Engine Test Cell
X053	Building 433 Paint Booth No. 3 with Particulate Filter and 1.0 MMBtu/hr Natural Gas Fired Oven
X054	Building 117 Paint Booth with Particulate Filter and 1.0 MMBtu/hr Natural Gas Fired Oven

In addition a non permitted emergency generator (Building 445) will be incorporated into the MSOP.

The Building 114 Abrasive Walk-in Blasting Units (09268 and 09271) were removed from the existing Title V. Since the original Title V was issued, Anniston Army Depot has more reliable emission factors to show that units 09268 and 09271 are actually insignificant activities.

Paint Booths AAAA, AAAB, and 1280 in Building 670 Paint Booth H2408 in Building 433, and the Download Reconfiguration Paint Booth in Building 695 are no longer in service and will be removed from the existing Title V Permit. Building 409 Abrasive Blast Unit (09404) is also not in service and will be removed from the existing Title V Permit.

Abrasive Blasting Operations

Building 114 Walk-in Blast Unit Barcode – 09281
This unit utilizes olivine, sand, steel shot, or coal slag to depaint, derusts, or surface prep various combat vehicle and small arms components. The emissions are controlled by a separate baghouse.

Building 130 Walk-in Blast Unit Barcode – K3182
This unit utilizes sodium bicarbonate to clean various components of military vehicles. The emissions from this unit are controlled by a baghouse.

Building 130 Walk-in Blast Unit Barcode – K3608
This unit utilizes garnet and olivine to clean various components of military vehicles. The emissions from this unit are controlled by a baghouse.

Building 409 Three (3) Walk-in Blast Units Barcodes – 09398, 09427, & 09399
These units utilize olivine, sand, steel shot, or coal slag to depaint, derust, or surface prep various combat vehicle and small arms components. The emissions from each unit are controlled by a separate baghouse.

Building 409 Spinner Hanger Blast Cabinet Barcode – K4607
This unit is used to clean large tank components. The emissions from this unit are controlled by a baghouse.

Building 409 Two (2) Rotary Blast Units Barcodes – 09403
This unit utilizes olivine, sand, steel shot, or coal slag to depaint, derust, or surface prep various combat vehicle and small arms components. The emissions are controlled by a baghouse.

Building 431 Spinner Hanger Barcode – L4463
This unit utilizes stainless steel shot to clean large tank and combat vehicle components. The emissions from this unit are controlled by a baghouse.

Building 432 Spinner Hanger Barcode – J4744
This unit is used to clean large tank components. The emissions from this unit are controlled by a baghouse.

Building 433 Three (3) Walk-in Blast Units Barcodes – L5056, L5057, & L5058
These units utilize olivine, sand, steel shot, or coal slag to depaint, derust, or surface prep various combat vehicle and small arms components. The emissions from each unit are controlled by a separate baghouse.

Building 474 Power Train Walk-in Blast Unit (X040)
This unit utilizes sand to depaint, derust, or surface prep various combat vehicle components. The emissions from this unit are controlled by a baghouse.

Emissions Standards:

Opacity Standards:

This source shall not discharge more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%. Opacity will be determined by 40 CFR Part 60, Appendix A, Method 9, unless otherwise specified in the Unit Specific provisos of this permit.

ADEM Admin. Code R. 334-3-4-.01(1).

.

Particulate Matter Emission Standards:

Particulate matter emissions from each unit shall not exceed the allowable set by Rule 335-3-4-.04. (Process Weight)

ADEM Admin. Code R. 335-3-4-.04-(2)

Particulate matter emissions from the Building 130 Walk-in Blast Unit (K3182) shall not exceed 1.15 lbs/hr.

ADEM Admin. Code R. 335-3-14-.04 (Anti-PSD)

Particulate matter emissions from the Building 130 Walk-in Blast Unit (K3608) shall not exceed 2.15 lbs/hr.

ADEM Admin. Code R. 335-3-14-.04 (Anti-PSD)

Particulate matter emissions from the Building 409 Spinner Hanger Blast Cabinet (K4607) shall not exceed 3.00 lbs/hr.

ADEM Admin. Code R. 335-3-14-.04 (Anti-PSD)

Particulate matter emissions from the Building 431 Abrasive Blast Spinner Hanger (L4463) shall not exceed 3.4 lbs/hr.

ADEM Admin. Code R. 335-3-14-.04 (Anti-PSD)

Particulate matter emissions from the Building 474 Power Train Walk-in Blast Unit shall not exceed 0.236 lbs/hr.

ADEM Admin. Code R. 335-3-14-.04 (Anti-PSD)

Expected Emissions:

The only emissions of significance would be particulate matter. The expected emissions are based on process rates, Texas environmental commission emission factors, and baghouse control efficiencies.

Expected Particulate Matter Emissions

Building	Barcode	lb/hr	TPY
114	09281	0.12	0.52
130	K3182	0.24	1.05
130	K3608	0.01	0.044
409	09398	0.12	0.51
409	09427	0.12	0.51
409	09399	0.12	0.51
409	K4607	0.69	3.00
409	09403	0.34	1.48
431	L4463	0.4	1.75
432	J4744	0.68	2.97
433	L5056	0.12	0.51
433	L5057	0.12	0.51
433	L5058	0.12	0.51
474	Walk-in	0.12	0.51

Periodic Monitoring:

Weekly visual observations of the stacks associated with these units (while the units are in operation) shall be conducted by personnel familiar with Method 9 of 40 CFR Part 60, Appendix A. If any visible emissions are observed, personnel certified in accordance with Method 9 of 40 CFR Part 60, Appendix A shall observe the emissions within two hours of the initial observation. If the observer certified in accordance with Method 9 of 40 CFR Part 60, Appendix A determines the emissions have opacity of 10% or greater as determined by Method 9 of 40 CFR 60, Appendix A, the facility shall investigate and initiate any necessary corrective actions within 4 hours. After any corrective actions, an additional observation by personnel certified in accordance with Method 9 of 40 CFR 60, Appendix A shall be performed in order to verify that visible emissions have been reduced.

In the event that a week goes by without the operation of this source, a weekly visual inspection shall not be required.

ADEM Admin. Code R. 335-3-16-.05(c)

Compliance Assurance Monitoring:

The Building 409 Spinner Hanger Blast Cabinet Barcode – K4607 and the Building 432 Spinner Hanger Barcode – J4744 are subject to the Compliance Assurance Monitoring (CAM) for particulate matter because the units are subject to an emission limit for PM, use a control device to achieve compliance with the applicable emissions limits, and have potential uncontrolled emissions greater than the major source threshold.

PM:

A separate baghouse controls emissions from each blast unit. Visible emissions are chosen as the performance indicator. Under normal operating conditions there would be no visible emissions from the baghouse stack. The present of visible emissions indicates reduced PM control device performance; therefore, the present of any visible emissions is the performance indicator.

PM CAM Plan for Spinner Hanger Blast Cabinets (Barcodes K4607 and J4744)

	Indicator 1
I. Indicator	Opacity
Measurement Approach	Visible Emissions observation by persons familiar with Method 9
II. Indicator Range	While the unit is operating, an excursion is defined as the presence of **any** visible emissions. Excursions trigger an inspection, corrective action, and a reporting requirement.
III. Performance Criteria A. Data Representative	Measurement is being made at the emission point (baghouse exhaust).
B. Verification of Operation Status	NA
C. QA/QC Practices and Criteria	The observer will be familiar with Reference Method 9.
D. Monitoring Frequency	Daily
E. Data Collection Procedures	The VE observation will be recorded with the time, date, and name of the observer.
F. Averaging Period	Instantaneous

Recordkeeping and Reporting:

Records of the required weekly visual inspections shall be maintained and should be readily available for inspection for a period of five years. These records shall include the date and results of the visual inspections. If any visible emissions are observed, the records shall include the date and time of the initial observation, and the date, time, and results of the Method 9 observation performed by personnel certified in acordance with Method 9 of 40 CFR 60, Appendix A. If corrective action is warranted, the records shall

include a description of the corrective actions taken, the date and time of the initial corrective action attempt, and the results of the followup visual inspection.

During weeks that this source is not in operation and a weekly visible observation is not required, it shall be recorded that the source was not in operation

ADEM Admin. Code R. 335-3-16-.05(c)

Storage Tanks

ANAD has many storage tanks for storing No. 2 fuel oil, diesel fuel, gasoline, kerosene, and used oil. Most of the storage tanks are less than 1000 gallons and are trivial or insignificant sources. The storage tanks, which are significant sources, are the Stage 1 Gasoline Dispensing Facilities and the Bulk Gasoline Plant.

Emissions Standards:

VOC Emission Standard:

Gasoline Dispensing Facilities- Stage I (Building 6 – Three 20,000 gallon GDP, Building 78 – 10,000 gallon GDP, and Building 422 - 10,000 gallon GDP)

The permittee shall not transfer, cause, or allow the transfer of gasoline from any gasoline tank truck into this unit unless the tank is equipped with a submerged fill pipe and the vapors displaced from the storage tank during filling are processed by a vapor control system in accordance with ADEM Admin. Code R. 335-3-6-.07(4).

ADEM Admin. Code R. 335-3-6-.07(3)

The permittee shall not permit the transfer of gasoline between a gasoline tank truck and this unit unless the gasoline tank truck complies with ADEM Admin. Code 335-3-6-.20 and the vapor control system is connected and operating in accordance with ADEM Admin. Code R. 335-3-6-.07(4).

ADEM Admin. Code R. 335-3-6-.07(5)(a)

The permittee shall not cause or allow gasoline to be spilled, discarded in sewers, stored in open containers, or handled in any other manner that would result in evaporation of the gasoline to the atmosphere.

ADEM Admin. Code R. 335-3-6-.07(6)

Bulk Gasoline Plant (Building 6 – Three 20,000 gallon Bulk Gasoline Plant)

The permittee shall not permit the unloading of gasoline into stationary storage tanks unless each tank is equipped with a vapor balance system as described in ADEM Admin. Code R. 335-3-6-.05(6) and approved by the director; and

(a) each tank is equipped with a submerged fill pipe, approved by the Director; or

(b) Each tank is equipped with a fill line whose discharge opening is not over 18 inches from the bottom of the tank.

ADEM Admin. Code R. 335-3-6-.05(3)

The permittee shall not permit the unloading of tank trucks or trailers at a bulk gasoline plant unless each tank truck or trailer is equipped with a vapor balance system as described in ADEM Admin. Code R. 335-3-6-.05(6) and complies with ADEM Admin. Code R. 335-3-6-.20(3)

ADEM Admin. Code R. 335-3-6-.05(4)

The permittee shall not allow the transfer of gasoline between tank truck or trailer and stationary storage tank unless:

(a) The transfer is conducted in accordance with Provisos under the "Emissions Standards" above, and

(b) The vapor balance system is in good working order and is connected and operating; and

(c) Gasoline tank truck or trailer hatches are covered at all times during unloading operations; and

(d) There are no leaks in the tank trucks' and trailers' pressure/vacuum relief valves and hatch covers, or the truck tanks or storage tanks, or associated vapor and liquid lines during unloading; and

(e) The pressure relief valves on above-ground storage vessels and tank trucks or trailers are set to release at no less than 4.8 kPA (0.7 psia) or the highest possible pressure (in accordance with state or local fire codes or the National Fire Prevention Association guidelines); and

(f) The gasoline truck or trailer has a valid Department Air Sticker as required by Rule 335-3-6-.20(4) attached and visibly displayed.

ADEM Admin. Code R. 335-3-6-.05(5)

The permittee shall not permit the loading of gasoline into tank trucks or trailers that are returning with vapors from gasoline dispensing facilities affected by ADEM Admin. Code R. 335-3-6-.07 unless each tank truck or trailer and the stationary storage tank is equipped with a vapor balance system as described in ADEM Admin. Code R. 335-3-6-.06(6) and complies with ADEM Admin. Code 335-3-6-.20(3) and

(a) equipment is available at the bulk gasoline plant to provide for the submerged filling of each tank truck or trailer; or

(b) each tank truck or trailer is equipped for bottom filling.

ADEM Admin. Code R. 335-3-6-.05(7)

The permittee shall not permit the disposal of waste gasoline in sewers, open containers, or in a manner that would result in evaporation.

ADEM Admin. Code R. 335-3-6-.05(8)

Expected Emissions:

The following is a list of significant storage tanks and there expected emissions based on actual throughput and calculated using Tanks 4.0. Each tank is equipped with a vapor balance system.

Tank #	Location	Date	Capacity	Product	VOCs
			Gallons		TPY
46	Building 422	Pre 1984	10,000	Gasoline	0.13
47	Building 6	Pre 1984	20,000	Gasoline	0.26
48	Building 6	Pre 1984	20,000	Gasoline	0.26
49	Building 6	Pre 1984	20,000	Gasoline	0.26
54	Building 78	Post 1984	10,000	Gasoline	0.13

Periodic Monitoring:

Gasoline Dispensing Facilities- Stage I and Bulk Gasoline Plant

This source is subject to no additional specific requirements other than those listed in the General Permit Provisos.

Recordkeeping and Reporting:

Gasoline Dispensing Facilities- Stage I

The permittee shall maintain written records of the monthly throughput quantities in gallons in these units for a minimum of five years after the date on which the documents were made. These records will be made available to the Department upon request.

ADEM Admin. Code R. 335-3-6-.07(5)(b)

Bulk Gasoline Plant

Records of the amount of gasoline loaded to and unloaded from the bulk gasoline plant shall be maintained.

ADEM Admin. Code R. 335-3-16-.05

Surface Coating Operations

Building 008 Paint Booth Barcode – 11552
This booth is a 45'x18'x15' walk-in booth used to paint wooden panels, furniture, and sign components. The particulate emissions are controlled by a particulate filter.

Building 058 Paint Booth Barcode – 12718
This booth is a 12'x22'x10' walk-in booth used to paint wooden panels, furniture, and sign components. The particulate emissions are controlled by a particulate filter.

Building 117 Paint Booth (Air Permit No. X054)
This paint booth is used to paint tracked military vehicle components. The particulate emissions are controlled by a particulate filter

Building 130 Paint Booth Barcode – G3401
This booth is a 12'x10'x7' walk-in booth used to paint miscellaneous metal parts and products. The particulate emissions are controlled by a particulate filter.

Building 143 Two Drive-through Paint Booths Barcodes J2101 & J9041
These booths are 82'x22'x18' drive through booths used to paint tracked military vehicles. The particulate emissions are controlled by a particulate filter.

Building 143 one Drive-through Paint Booth Barcode L4039
This booth is used to paint various small parts of armored vehicles and engine components. The particulate emissions are controlled by a particulate filter.

Building 409 three walk-in Paint Booths Barcodes G3738, 09385, & 09388
Each booth is a 20'x10'x13' walk-in paint booth used to paint tank like military vehicles. The particulate emissions are controlled by a particulate filter.

Building 433 three drive-through Paint Booths Barcodes K0698, K0723
Each booth is a 25'x15'x15' drive-through paint booth used to paint tank like tracked military vehicles. Particulate emissions from units 9362 and, 9363 are controlled by three staged particulate matter filter. The particulate matter emissions from unit H2408 are controlled by a single stage dry particulate filter.

Building 433 Paint Booth (Air Permit No. X053)
This paint booth is used to paint tracked military vehicles (Tank-like) and components. The particulate emissions are controlled by a particulate filter

Building 433 Paint Booth No. 4 Barcodes J9027 (Air Permit No. X046)
This booth is used to paint small parts of armored vehicles and engine components. The particulate emissions are controlled by a particulate filter

Building 474 two walk-in Paint Booths Barcodes (Air Permit No. X042)
Each walk-in paint booth is used to paint small parts of armored vehicles and engine components. The particulate emissions are controlled by a dry particulate filter.

Building 499 drive-through Paint Booth Barcodes G8729
This booth is a 57'x36'x17' drive-through booth used to paint tracked military vehicles. The particulate emissions are controlled by a particulate filter.

Building 501 two drive-through Paint Booths Barcodes E7634 and E7635
Each booth is a 34'x20'x13' drive-through paint booth used to paint tank like tracked military vehicles. The particulate emissions are controlled by a particulate filter.

Emissions Standards:

The following paint booths have no additional emissions standards other than those listen in the general provisos.

Building #	**Barcode/No.**
008	11552
058	12718
117	X054
143	J2101 & J9041
409	G3738, 09385, & 09388
433	X053
501	E7634 & E7635

Emissions Standards - Building 130 Paint Booth:

Emissions of Particulate matter (PM) from the Building 130 Paint Booth G3401 shall not exceed 1.80 tons during any consecutive rolling 12 month period, based on the percent weight of solids in the paint after applying transfer and control efficiencies.

ADEM Admin. Code R. 335-3-14-.04 (Anti-PSD)

Emission of Volatile Organic Compounds (VOCs) from all operations associated with the Building 130 Paint Booth G3401 (including but not limited to surface coating, storage, cleanup, etc.,) shall not exceed 39.5 tons in any consecutive rolling 12 month period, based on the premise that all VOCs applied are emitted.

ADEM Admin. Code R. 335-3-14-.04 (Anti-PSD)

Emissions Standards - Building 143 Paint Booth L4039:

Emission of Volatile Organic Compounds (VOCs) from all operations associated with the Building 143 Paint Booth L4039 (including but not limited to surface coating, storage, cleanup, etc.,) shall not exceed a total of 39.5 tons in any consecutive rolling 12 month period, based on the premise that all VOCs applied are emitted.

ADEM Admin. Code R. 335-3-14-.04 (Anti-PSD)

Emission of Hazardous Air Pollutants (HAPs) from all operations associated with the Building 143 Paint Booth L4039 (including but not limited to surface coating, storage, cleanup, etc.,) shall not exceed a total of 9.5 tons of any single HAP or 24.5 tons of any combination of HAPs in any consecutive rolling 12 month period, based on the premise that all HAPs applied are emitted.

ADEM Admin. Code R. 335-3-14-.06 (Anti-112g)

Emissions Standards - Building 433 Paint Booths K0698 & K0723:

Emission of Volatile Organic Compounds (VOCs) from all operations associated with the Building 433 Paint Booths K0698 & K0723 (including but not limited to surface coating, storage, cleanup, etc.,) shall not exceed a total of 39.5 tons in any consecutive rolling 12 month period, based on the premise that all VOCs applied are emitted.

ADEM Admin. Code R. 335-3-14-.04 (Anti-PSD)

Emission of Hazardous Air Pollutants (HAPs) from all operations associated with the Building 433 Paint Booths K0698 & K0723 (including but not limited to surface coating, storage, cleanup, etc.,) shall not exceed a total of 9.5 tons of any single HAP or 23.5 tons of any combination of HAPs in any consecutive rolling 12 month period, based on the premise that all HAPs applied are emitted.

ADEM Admin. Code R. 335-3-14-.06 (Anti-112g)

Emissions Standards - Building 433 Paint Booth No. 4 Barcode J9027 (X046)

Emission of Volatile Organic Compounds (VOCs) from all operations associated with the Building 433 Paint Booth No. 4 Barcode J9027 (including but not limited to surface coating, storage, cleanup, etc.,) shall not exceed 39.5 tons in any consecutive rolling 12 month period, based on the premise that all VOCs applied are emitted.

ADEM Admin. Code R. 335-3-14-.04 (Anti-PSD)

Emission of Hazardous Air Pollutants (HAPs) from all operations associated with the Building 433 Paint Booth No. 4 Barcode J9027 (including but not limited to surface coating, storage, cleanup, etc.,) shall not exceed 9.5 tons of any single HAP or 24.5 tons of any combination of HAPs in any consecutive rolling 12 month period, based on the premise that all HAPs applied are emitted.

ADEM Admin. Code R. 335-3-14-.06 (Anti-112g)

Emissions Standards - Building 474 Paint Booths Nos. 1 & 2 (X042):

The Particulate Matter (PM) emissions from the Building 474 Paint Booths Nos. 1 & 2 shall not exceed a total of 0.36 lbs/hr.

ADEM Admin. Code R. 335-3-14-.04 (Anti-PSD)

Emission of Volatile Organic Compounds (VOCs) from all operations associated with the Building 474 Paint Booths Nos. 1 & 2 (including but not limited to surface coating, storage, cleanup, etc.,) shall not exceed a total of 35.0 tons in any consecutive rolling 12 month period, based on the premise that all VOCs applied are emitted.

ADEM Admin. Code R. 335-3-14-.04 (Anti-PSD)

Emission of Hazardous Air Pollutants (HAPs) from all operations associated with the Building 474 Paint Booths Nos. 1 & 2 (including but not limited to surface coating, storage, cleanup, etc.,) shall not exceed a total of 9.0 tons of any single HAP or 23.5 tons of any combination of HAPs in any consecutive rolling 12 month period, based on the premise that all HAPs applied are emitted.

ADEM Admin. Code R. 335-3-14-.06 (Anti-112g)

Emissions Standards - Building 499 Paint Booth G8729

Emission of Volatile Organic Compounds (VOCs) from all operations associated with the Building 499 Paint Booth G8729 (including but not limited to surface coating, storage, cleanup, etc.,) shall not exceed 39.5 tons in any consecutive rolling 12 month period, based on the premise that all VOCs applied are emitted.

ADEM Admin. Code R. 335-3-14-.04 (Anti-PSD)

Emission of Hazardous Air Pollutants (HAPs) from all operations associated with the Building 499 Paint Booth G8729 (including but not limited to surface coating, storage, cleanup, etc.,) shall not exceed 9.5 tons of any single HAP or 24.5 tons of any combination of HAPs in any consecutive rolling 12 month period, based on the premise that all HAPs applied are emitted.

ADEM Admin. Code R. 335-3-14-.06 (Anti-112g)

Expected Emissions:

Expected emissions are based on mass balance, actual or expected paint usage, and 99% particulate filter removal efficiency.

Building	Unit #	PM (TPY)	VOCs (TPY)	HAPs (TPY)
008	11552	0.054	22.50	10.8
058	12718	0.054	22.50	10.8
117	X054	0.19	15.20	2.58
130	G3401	0.08	9.57	2.0
143a	J2101	0.11	25.86	1.72
143a	J9041	0.09	32.81	4.02
143	L4039	0.13	12.2	1.56
409	G3738	0.16	17.3	1.40
409	09385	0.18	24.5	2.30
409	09388	0.13	15.51	2.69
433	K0698	0.044	5.50	1.85
433	K0723	0.077	10.42	2.97
433	J9027	0.124	39.5	9.0/24.5
433	X053	0.32	21.12	2.80

474	1 & 2	0.25	35.0	9.0/23.5
499	G8729	0.16	3.20	1.29
501	E7634	0.197	82.0	10.45
501	E7635	0.197	82.0	10.45

Periodic Monitoring:

The dry filters(s) associated with these sources shall be inspected on at least an annual basis to ensure maintenance is performed in such a manner as to minimize the emission of particulate matter.

ADEM Admin. Code R. 335-3-16-.05(c)

CAM

These sources are not subject to CAM since the uncontrolled potential emissions would be less than the major source threshold.

Recordkeeping and Reporting All Units:

Records of the required dry filter inspections, along with records of any maintenance performed on the filter(s) shall be kept in a form suitable for inspection for at least fire years following the date of generation of the record.

ADEM Admin. Code R. 335-3-16-.05(c)

Recordkeeping and Reporting All Units with Anti-PSD Limits

Accurate and understandable records, concerning VOC, PM, and HAP emissions shall be kept in a form suitable for inspection for at least 5 years following the date of the record. These records will be made available immediately upon request and will contain the following information:

(a) The type, quantity in gallons, and weight in lbs, of each VOC and HAP containing materials used each calendar month.

(b) The HAP content by weight (in pounds per gallon) of each coating used shall be determined using EPA Test Method 311, as defined in 40 CFR 63, Appendix A, or equivalent vendor data approved by the Department in advance. The VOC content by weight (in pounds per gallon) of each VOC containing material used, determined by using EPA Test Method 24, as defined in 40 CFR 60, Appendix A, or equivalent vendor data approved by the Department in advance. The VOC content of coatings may be determined by test method on a random basis to verify formulation data and such other times as the Department may request;

(c) The percent by volume and percent by weight of VOCs, HAPs, solids, water, and content of each VOC and HAP containing materials used each calendar month.

(d) Complete inventories of VOC and HAP containing materials (their usage with VOC and HAP content) shall be made at the end of each calendar month. Compliance with VOC, HAP, and PM limits shall be based upon these monthly materials use inventories and the use and control efficiency of the particulate filters. Emissions calculations and records will also incorporate the use and control efficiency of the particulate filters.

(e) The transfer efficiency of each coating operation and control efficiencies for all control devices. Total PM emissions shall be calculated based on these efficiencies;

(f) The amount of VOCs, HAPs, and PM emitted each calendar month expressed in the units of pounds and tons.

(g) The rolling 12-month total of VOCs, HAPs, and PM emitted in the units of pounds and tons.

ADEM Admin. Code R. 335-3-16-.05(c)

Woodworking Operation and Carpentry Shops

ANAD operates woodworking and carpentry shops in Buildings 5, 127, 379, and 689. These shops contain power saws and other woodworking equipment. Particulate emissions from the woodworking operations are vented to outdoor cyclone systems.

Emissions Standards:

Opacity Standards:

This source shall not discharge more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%. Opacity will be determined by 40 CFR Part 60, Appendix A, Method 9, unless otherwise specified in the Unit Specific provisos of this permit.

ADEM Admin. Code R. 334-3-4-.01(1).

.

Particulate Matter Emission Standards:

Particulate matter emissions from each unit shall not exceed the allowable set by Rule 335-3-4-.04.

ADEM Admin. Code R. 335-3-4-.04-(2)

Expected Emissions:

The expected particulate matter emission rate from each shop is approximately 0.856 lbs/hr (3.78 TPY). This is based on material balance, the expected hours of operation, and 80% cyclone control efficiency.

Periodic Monitoring:

Weekly visual observations of the cyclone stacks associated with these units (while the units are in operation) shall be conducted by personnel familiar with Method 9 of 40 CFR Part 60, Appendix A. If any visible emissions are observed, personnel certified in accordance with Method 9 of 40 CFR Part 60, Appendix A shall observe the emissions within two hours of the initial observation. If the certified observer determines the emissions have opacity of 10% or greater as determined by Method 9 of 40 CFR 60, Appendix A, the facility shall investigate and initiate any necessary corrective actions within 4 hours. After any corrective actions, an additional observation by personnel certified in accordance with Method 9 of 40 CFR 60, Appendix A shall be performed in order to verify that visible emissions have been reduced.

In the event that a week goes by without the operation of this source, a weekly visual inspection shall not be required.

ADEM Admin. Code R. 335-3-16-.05(c)

CAM

These sources are not subject to CAM since the uncontrolled potential emissions would be less than the major source threshold.

Recordkeeping and Reporting:

Records of the required weekly visual inspections shall be maintained and should be readily available for inspection for a period of five years. These records shall include the date and results of the visual inspections. If any visible emissions are observed, the records shall include the date and time of the initial observation, and the date, time, and results of the Method 9 observation performed by personnel certified in accordance with Method 9 of 40 CFR 60, Appendix A. If corrective action is warranted, the records shall include a description of the corrective actions taken, the date and time of the initial corrective action attempt, and the results of the follow-up visual inspection.

During weeks that this source is not in operation and a weekly visible observation is not required, it shall be recorded that the source was not in operation.

ADEM Admin. Code R. 335-3-16-.05(c)

Chromium Electroplating Operation

ANAD operates two hard chromium electroplating lines (Barcodes K4461 & K4462) in Building 114. The electroplating lines are used to plate various metal parts. The emissions from the chromium electroplating operation are controlled by a mesh pad demister system.

MACT

The hard chromium plating lines in Building 114 are subject to the applicable portions of 40 CFR 63 Subpart N- National Emission Standards for Hazardous Air Pollutants for Chromium Emissions from Hard and Decorative Electroplating and Chromium Anodizing Tanks.

40 CFR Part 63 Subpart N and ADEM Admin. Code R. 335-3-11-.06(13)

These units are subject to the General Provisions of 40 CFR Part 63 as described in Table 1 to Subpart N of 40 CFR Part 63- "General Provisions Applicability to Subpart N".

40 CFR Part 63 Subpart N §63.340(b)

Emissions Standards:

Particulate Matter Emission Standards:

Particulate matter emissions from each unit shall not exceed the allowable set by Rule 335-3-4-.04.

ADEM Admin. Code R. 335-3-4-.04-(2)

MACT Standards:

During tank operation, the concentration of total chromium in the exhaust gas stream discharged to the atmosphere shall not exceed 0.015 milligrams of total chromium per dry standard cubic meter of ventilation air.

40 CFR Part 63 Subpart N §63.342(c)(1)(i)

The emission limit stated above applies only during tank operation, and also applies during periods of startup and shutdown as these are routine occurrences. The emission limit does not apply during periods of malfunction, but the work practice standards that address operation and maintenance and that are required by 40 CFR 63.342(f) must be followed during malfunctions.

40 CFR Part 63 Subpart N §63.342(b)

At all times, including periods of startup, shutdown, and malfunction, the Permittee shall operate and maintain these sources, including associated air pollution control devices and monitoring equipment, in a manner consistent with the Operation and Maintenance Plan required by 40 CFR 63.342(f)(3). Malfunctions shall be corrected as soon as practicable after their occurrence in accordance with the Operation and Maintenance Plan required by 40 CFR 63.342(f)(3).

40 CFR Part 63 Subpart N §63.342(f)(1)(i) & §63.342(f)(1)(ii)

Expected Emissions:

PM Emissions:

The expected PM emissions are 1.04 lbs/hr (4.54 TPY) from line 1 and 0.493 lbs/hr (1.92 TPY) from line 2. This is based on AP-42 emission factors and the expected hours of operation.

Chromium Emissions:

The expected chromium emissions are 0.003 lbs/hr (0.013 TPY) from line 1 and 0.001 lbs/hr (0.004 TPY) from line 2. This is based on AP-42 emission factors and the expected hours of operation.

Periodic Monitoring:

As an indicator of compliance with the particulate and opacity emission limits, weekly visual observations of the stacks (while the units are in operation) shall be conducted by personnel familiar with Method 9 of 40 CFR Part 60, Appendix A. If any visible emissions are observed, personnel certified in accordance with Method 9 of 40 CFR Part 60, Appendix A shall observe the emissions within two hours of the initial observation. If the certified observer determines the emissions have opacity of 10% or greater as determined by Method 9 of 40 CFR 60, Appendix A, the facility shall investigate and initiate any necessary corrective actions within 4 hours. After any corrective actions, an additional observation by personnel certified in accordance with Method 9 of 40 CFR 60, Appendix A shall be performed in order to verify that visible emissions have been reduced.

In the event that a week goes by without the operation of these sources, a weekly visual inspection shall not be required.

ADEM Admin. Code R. Rule 335-3-16-.05(c)

Once per quarter, the permittee shall visually inspect each composite mesh-pad system to ensure there is proper drainage, no chronic acid build-up on the pads, and no evidence of chemical attack on the structural integrity of the devices.

Table 1 to 40 Part 63 Subpart N

Once per quarter, the permittee shall visually inspect the back portion of each mesh pad closest to the fan to ensure there is no breakthrough of chromic acid mist.

Table 1 to 40 Part 63 Subpart N

Once per quarter, the permittee shall visually inspect the ductwork from each tank to the control devices to ensure there are no leaks.

Table 1 to 40 Part 63 Subpart N

The permittee shall perform washdowns of the composite mesh-pads in accordance with the manufacturer's recommendations.

Table 1 to 40 Part 63 Subpart N

The permittee shall monitor and record the pressure drop across the composite mesh-pad system once each day that the source is in operation. To be in compliance, the composite mesh-pad system shall be operated within ± 2 inches of water column of the pressure drop value established during the initial performance test, or shall be operated within the range of compliant values for pressure drop established during multiple performance tests.

40 Part 63 Subpart N §63.343(c)(1)(ii)

The Operation and Maintenance Plan required by 40 CFR 63.342(f)(3) shall include the following elements:

(a) The plan shall specify the criteria for the source, the add-on air pollution control device, and the process and control system monitoring equipment, and shall include a standardized checklist to document the operation and maintenance of this equipment,

(b) The plan shall incorporate the work practice standards for the mesh-pad demister as identified in Table 1 of 40 CFR 63 Subpart N.

(c) The plan shall specify procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions do not occur; and

(d) The plan shall include a systematic procedure for identifying malfunctions of process equipment, add-on air pollution control devices, and process control system monitoring equipment and for implementing corrective actions to address such malfunctions.

If the Operation and Maintenance Plan fails to address or inadequately addresses an event that meets the definition of malfunction at the time the plan is initially developed, the permittee shall revise the Operation and Maintenance Plan within 45 days after such an event occurs. The revised Plan shall include procedures for operating and maintaining the process equipment, add-on air pollution control device, or monitoring equipment during similar malfunction events, and a program for corrective actions for such events

40 Part 63 Subpart N §63.342(f)(3)(i) and §63.342(f)(3)(ii)

Recordkeeping and Reporting:

Records of the required weekly visual inspections shall be maintained and should be readily available for inspection for a period of five years. These records shall include the date and results of the visual inspections. If any visible emissions are observed, the records shall include the date and time of the initial observation, and the date, time, and

results of the Method 9 observation performed by personnel certified in accordance with Method 9 of 40 CFR 60, Appendix A. If corrective action is warranted, the records shall include a description of the corrective actions taken, the date and time of the initial corrective action attempt, and the results of the follow-up visual inspection.

During weeks that these sources are not in operation and a weekly visible observation is not required, it shall be recorded that the source was not in operation.

ADEM Admin. Code R. Rule 335-3-16-.05(c)

If actions taken by the permittee during periods of malfunction are inconsistent with the procedures specified in the Operation and Maintenance Plan required by 40 CFR 63.342(f)(3)(i), the permittee shall record the actions taken for that event and shall report by phone such actions within 2 working days after commencing actions inconsistent with the plan. This report shall be followed by a letter within 7 working days after the end of the event, unless the permittee makes alternative reporting arrangements, in advance, with the Department.

40 Part 63 Subpart N §63.342(f)(3)(iv)

The permittee shall keep the written Operation and Maintenance Plan on record to be made available for inspection, upon request, for the life of the source or until the source is no longer subject to the provisions of 40 CFR 63 Subpart N. In addition, if the Operation and Maintenance Plan is revised, the permittee shall keep previous (i.e., superceded) versions of the Operation and Maintenance Plan on record to be made available for inspection, upon request, for a period of 5 years after each revision to the Plan.

40 Part 63 Subpart N §63.342(f)(3)(v)

The Permittee shall maintain the following records for each source:

(a) Inspection records for the add-on air pollution control device and monitoring equipment, to document that the inspection and maintenance required by the work practice standards of 40 CFR 63.342(f) and Table 1 of 40 CFR 63.342 have taken place. The record can take the form of a checklist and should identify the device inspected, the date of the inspection, a brief description of the working condition of the device during the inspection, and any actions taken to correct deficiencies found during the inspection;

(b) Records of all maintenance performed on the source, the add-on air pollution control device, and monitoring equipment;

(c) Records of the occurrence, duration, and cause (if known) of each malfunction of process, add-on air pollution control device, and monitoring equipment;

(d) Records of actions taken during periods of malfunction when such actions are inconsistent with the Operation and Maintenance Plan;

(e) Test reports documenting the results of all performance tests;

(f) Other records, which may take the form of checklists, necessary to demonstrate consistency with the provisions of the Operation and Maintenance Plan required by 40 CFR 63.342(f)(3);

(g) All measurements as may be necessary to determine the conditions of performance tests, including measurements to determine compliance with the special compliance procedures of 40 CFR 63.344(e);

(h) Records of monitoring data required by 40 CFR 63.343(c) that are used to demonstrate compliance with the standard, including the date and time the data are collected;

(i) The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during malfunction of the process, add-on air pollution control device, or monitoring equipment;

(j) The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during periods other than malfunction of the process, add-on air pollution control device, or monitoring equipment;

(k) The total process operating time of the affected source during the reporting period; and

(l) All documentation supporting the notifications and reports as require by 40 CFR 63.9, 63.10, and 63.347.

40 Part 63 Subpart N §63.346(b)

All records shall be maintained for a period of at least five years.

40 Part 63 Subpart N §63.346(c)

The permittee shall submit a summary report to demonstrate the ongoing compliance status of each source. The ongoing compliance status reports shall be submitted semi-annually, except when:

(a) The Department determines on a case-by-case basis that more frequent reporting is necessary to accurately assess the compliance status of the source; or

(b) The monitoring data collected by the permittee in accordance with 40 CFR 63.343(c) show that the emission limit has been exceeded, in which case quarterly reports shall be submitted. Once the permittee reports an exceedance, ongoing compliance reports shall be submitted quarterly until a request to reduce reporting frequency under 40 CFR 63.347(g)(2) is approved

40 Part 63 Subpart N §63.347(g)

If the permittee is required to submit ongoing compliance status reports on a quarterly (or more frequent) basis, the permittee may reduce the frequency of reporting to semi-annual if all of the following conditions are met:

(a) For one full year (e.g., 4 quarterly or 12 monthly reporting periods), the ongoing compliance status reports demonstrate that the source is in compliance with the relevant emission limit;

(b) The permittee continues to comply with all applicable recordkeeping and monitoring requirements of Subpart A and Subpart N of 40 CFR 63; and

The Department does not object to a reduced reporting frequency.

40 Part 63 Subpart N §63.347(g)(2)(i)

The frequency of submitting ongoing compliance status reports may be reduced only after the permittee notifies the Department in writing of his or her intention to make such a change, and the Department does not object to the intended change. If the Department disapproves the permittee's request to reduce the reporting frequency, the Department will notify the permittee in writing within 45 days after receiving notice of the permittee's intention. The notification from the Department will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.

40 Part 63 Subpart N §63.347(g)(2)(ii)

As soon as the monitoring data required by 40 CFR 63.343(c) show that the source is not in compliance with the relevant emission limit, the frequency of reporting shall revert to quarterly, and the owner shall state this exceedance in the ongoing compliance status report for the next reporting period. After demonstrating ongoing compliance with the relevant emission limit for another full year, the permittee may again request approval from the Department to reduce the reporting frequency as allowed by 40 CFR 63.347(g)(2).

40 Part 63 Subpart N §63.347(g)(2)(iii)

The ongoing compliance status reports shall include the following information:

(a) The company name and the address of the source;

(b) An identification of the operating parameter that is monitored for compliance determination as required by 40 CFR 63.343(c);

(c) The relevant emission limitation for the affected source, and the operating parameter value, or range of values, that correspond to compliance with the emission limitation as specified in the notification of compliance status required by 40 CFR 63.347(e);

(d) The beginning and ending dates of the reporting period;

(e) A description of the types of processes performed in the source;

(f) The total operating time of the source during the reporting period;

(g) A summary of operating parameter values, including the total duration of excess emissions during the reporting period as indicated by those values, the total duration of excess emissions expressed as a percent of the total operating time during that reporting period, and a breakdown of the total

duration of excess emissions during the reporting period into those that are due to process upsets, control equipment malfunctions, other known causes, and unknown causes;

(h) A certification by a responsible official, as defined in 40 CFR 63.2, that the work practice standards in 40 CFR 63.342(f) were followed in accordance with the Operation and Maintenance Plan for the source;

(i) If the Operation and Maintenance Plan was not followed, an explanation of the reasons for not following the provisions, an assessment of whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred, and a copy of the report(s) required by 40 CFR 63.342(f)(3)(iv) documenting that the Operation and Maintenance Plan was not followed;

(j) A description of any changes in monitoring, processes, or controls since the last reporting period;

(k) The name, title, and signature of the responsible official who is certifying the accuracy of the report; and

(l) The date of the report.

40 Part 63 Subpart N §63.347(g)(3)

Engine Testing

ANAD operates numerous engine test cells used to service various reciprocating and turbine engines. The engines burn either diesel or JP-8 as fuel. Test cell X052 located near Building 128 is used to test turbine engines plus drive trains for leaks. Five tests cells (X047) used for turbine engine rated at 1500 hp are located in Building 128. The Building 128 test stands have a PSD avoidance for NOx emissions which corresponds to a fuel use limit. One power pack (turbine engine/transmission sets) test stand is located near Building 128. Cells 2(X050),3, 4,5,7,8,9,13,14,15,17,18 and 19 in Building 410 are used for testing reciprocating engines. Cells 10, 11, 12, 16 and 20 in Building 410 are used to test turbine engines. Cell 6 in Building 410 is used to test auxiliary power units (less than 25 hp). Building 467 contains two test cells (467-L & 467-R), one is used for reciprocating engines and one is used for turbine engines. Building 474 contains seven engine test cells (X043) used to test reciprocating engines. The Building 474 test stands have PSD avoidance limits for NOx and VOCs emissions.

MACT

These units are subject to 40 CFR Part 63 Subpart PPPPP, “National Emission Standards for Hazardous air Pollutants: Engine Test Cells/Stands”. These units are subject, however the test stands are considered an existing affected source and therefore do not have to meet the requirements of 40 CFR Part 63 Subpart PPPPP.

Emissions Standards:

NOx Standards:

Building 128 – Five Turbine Engine Test Cells (X047):

The total NO_x emissions from the five engine test cells in Building 128 shall not exceed 39.0 tons in any consecutive rolling 12-month period.

ADEM Admin. Code R. 335-3-14-.04

The Building 128 – Five Turbine Engine Test Cells shall burn no more than a total of 635,000 gallons of diesel fuel or JP-8 in any consecutive twelve month period.

ADEM Admin. Code R. 335-3-14-.04

Building 128 –Turbine Engine Test Cell (X052):

The Building 128 –Turbine Engine Test Cell (X052) shall burn no more than a total of 246,761 gallons of diesel fuel or JP-8 in any consecutive twelve month period.

ADEM Admin. Code R. 335-3-14-.04

Building 410 – Test Cell #2 (X050):

The Building 410 – Test Cell #2 shall burn no more than a total of 124,830 gallons in any consecutive twelve month period.

ADEM Admin. Code R. 335-3-14-.04

Building 474 – Seven Engine Test Cells (X043):

The total NO_x emissions from the Seven Engine Test Cells in Building 474 shall not exceed 34.0 tons in any consecutive rolling 12-month period.

ADEM Admin. Code R. 335-3-14-.04

VOC Standards:

Building 474 – Seven Engine Test Cells (X043):

The total Volatile Organic Compounds (VOCs) emissions from all seven engine test cells shall not exceed 3.72 tons in any consecutive rolling 12-month period.

ADEM Admin. Code R. 335-3-14-.04

Expected Emissions:

Building 128 – Five Turbine Engine Test Cells (X047)

The total expected emissions from the Building 128 test cells were calculated based on AP-42 emission factors and the fuel usage limit.

Pollutant	**lb/hr (total)**	**TPY (total)**
PM	0.846	0.532
$S0_2$	2.33	1.46
NO_x	62.1	39.0
CO	0.233	0.146
VOC	0.29	0.018

Building 128 – Turbine Engine Test Cell (X052)

The expected emissions from the Building 128 test cell (X050) were calculated based on AP-42 emission factors and the fuel usage limit.

Pollutant	**lb/hr**	**TPY**
PM	0.19	0.21
$S0_2$	0.52	0.57
NO_x	13.84	15.16
CO	0.05	0.06
VOC	0.01	0.01

Building 410 –Engine Test Cells

The expected emissions from each Building 410 test cell were calculated based on the emission factors and the expected annual operation.

Each Cell	**2,4,5,7,8,9,13,14, 15, 17, 18 & 19**		**10,11,12,16,20**	
Pollutant	**lb/hr**	**TPY**	**lb/hr**	**TPY**
PM	0.9	1.64	0.170	0.124
$S0_2$	0.84	1.53	0.47	0.34
NO_x	12.8	23.3	12.5	9.1
CO	2.76	5.0	0.047	0.034
VOC	1.04	1.90	0.006	0.004

Building 410 – Test Cell #2 (X050):

Potential emissions based on AP-42 Tables 3.1-1 and 3.1-2a, maximum fuel usage of 112.68 gallons per hour, and annual fuel usage limited to 246,761 gallons any 12 month period:

Pollutant	lb/hr (total)	TPY (total)
PM	0.19	0.21
$S0_2$	0.52	0.57
NO_x	13.84	15.16
CO	0.05	0.06
VOC	0.01	0.01

Building 474 – Seven Engine Test Cells (X043):

The total expected emissions from the Building 474 test cells were calculated based on AP-42 emission factors and annual fuel usage.

Pollutant	lb/hr (total)	TPY (total)
PM	2.81	2.01
$S0_2$	4.37	3.13
NO_x	47.5	34.0
CO	12.0	8.59
VOC	2.65	3.72

Periodic Monitoring:

These sources are subject to no additional specific requirements other than those listed in the General Permit Provisos.

CAM

These sources are not subject to CAM since they do not have a control device.

Recordkeeping and Reporting:

Building 128 – Five Turbine Engine Test Cells:

Records of monthly and twelve month rolling totals documenting the type and amount of fuel combusted in the Five Turbine Engine Test Cells in Building 128 shall be kept in permanent form suitable for inspection and these records must be maintained for a minimum of 5 years following the day of such record.

Building 128 –Turbine Engine Test Cell (X050):

Records of monthly and twelve month rolling totals documenting the type and amount of fuel combusted in the Turbine Engine Test Cell shall be kept in permanent form suitable for inspection and these records must be maintained for a minimum of 5 years following the day of such record.

Building 410 – Test Cell #2:

Records of monthly and twelve month rolling totals documenting the type and amount of fuel combusted in the Building 410 – Test Cell #2 shall be kept in permanent form suitable for inspection and these records must be maintained for a minimum of 5 years following the day of such record.

Building 474 – Seven Engine Test Cells:

Records of monthly and rolling 12 month totals of all NO_x and VOCs emitted from the Building 474 Test Stands shall be recorded. Accurate and understandable records of consumption, which records at least the last five years of data, will be maintained in a permanent form suitable for inspection and be available immediately upon request. This facility shall provide a copy of records and supporting background documents upon request that pertain to its air permit. These records shall contain the following information:

(a) Engine horsepower of each engine tested.
(b) The type, quantity in gallons of each fuel used each calendar month.
(c) The emission factor used for determining the amount of NO_x and VOCs emitted.
(d) The amount of NO_x and VOCs emitted each calendar month expressed in the units of pounds and tons.
(e) The rolling 12-month total of all NO_x and VOCs emitted in the units of pounds and tons.

A report summarizing the above information shall be submitted for each calendar quarter by the 30th day of the month following the end of the quarter, in a format approved by the Department in advance.

Scrap Metal Flashing Furnace (X049)

The flashing furnace is used to thermally remove energetic material residue (ammonium perchlorate) from scrap metal material from the missile recycling facility. The total burner capacity is 6 MMBtu/hr. the furnace burns primarily propane, but is allowed to burn low sulfur diesel fuel and natural gas.

Emissions Standards:

Opacity Standards:

This source shall not discharge more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%. Opacity will be determined by 40 CFR Part 60, Appendix A, Method 9, unless otherwise specified in the Unit Specific provisos of this permit.

ADEM Admin. Code R. 334-3-4-.01(1).

SO2 Emission Standards:

This unit shall burn only propane, natural gas, or fuel oil. The sulfur content of the fuel oil shall not exceed 15ppm by weight.

ADEM Admin. Code R. 335-3-14-.04

Particulate Emission Standards:

Emissions of particulate matter shall not exceed 0.10 pounds per 100 pounds charged to the furnace, as determined by Method 5 of 40 CFR 60, Appendix A (most recent edition).

ADEM Admin. Code R. 335-3-3-.02(3)

Expected Emissions:

The expected emissions from propane combustion were calculated based on AP-42 emission factors and the expected annual operation of 8760 hours per year. The expected HCL emissions were calculated based on test data.

Pollutant	lb/hr	TPY
CO	0.20	0.89
NOx	1.20	5.26
PM	0.04	0.17
SO_2	0.00	0.005
VOC	0.03	0.14
HCL	1.0	4.38

Periodic Monitoring:

Based on the low level of expected emissions from these sources as compared to the regulatory allowable no periodic monitoring is required.

CAM

These sources are not subject to CAM since they do not have a control device.

Recordkeeping and Reporting:

Records of fuel oil sulfur content must be kept in a form suitable for inspection. Fuel supplier certifications may be used as records for fuel oil sulfur content. These records shall be retained for at least five years following the date of generation and shall be made available upon request.

DRMO Mobile Shredder (X051)

The shredding system is used to reduce body armor, cammo nets, plastics, rubber, fiberglass, canvas, and various metal items to small pieces. No further processing of the materials would occur. Metal items may include light steel, copper, aluminum, iron, molybdenum, nickel, chromium, manganese, and brass. The Shredder includes one 350 hp diesel engine and one 175 hp diesel engine.

Emissions Standards:

Opacity Standards:

This source shall not discharge more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%. Opacity will be determined by 40 CFR Part 60, Appendix A, Method 9, unless otherwise specified in the Unit Specific provisos of this permit.

ADEM Admin. Code R. 334-3-4-.01(1).

NOx Emission Standards:

The total NO_x emissions from this unit shall not exceed 0.613 lbs/gallon of diesel fuel, as determined by EPA Reference Method 7e of 40 CFR Part 60 or alternative approved by the Department.

The amount of diesel fuel utilized by this unit shall not exceed a total of 129,000 gallons in any consecutive twelve month period.

ADEM Admin. Code R. 335-3-14-.04

Expected Emissions:
The expected emissions from propane combustion were calculated based on AP-42 emission factors and the fuel usage limit of 129,000 gallons of diesel fuel per year.

	Diesel Combustion		**Shredder**	
Pollutant	**Potential Emissions (lb/hr)**	**Limited Potential Emissions (TPY)***	**Potential Emissions (lb/hr)**	**Potential Emissions (TPY)**
PM	1.16	2.78	0.048	0.212
S02	1.08	2.60		
NOx	16.28	39.5		
CO	3.51	8.52		
VOC	1.31	3.14		

*Based on a fuel use limit of 129,000 gallons of diesel fuel per year.

Periodic Monitoring:

Based on the low level of expected emissions from these sources as compared to the regulatory allowable no periodic monitoring is required.

CAM

These sources are not subject to CAM since they do not have a control device.

Recordkeeping and Reporting:

Records of monthly and twelve month rolling totals documenting the type and amount of fuel combusted shall be kept in permanent form suitable for inspection and these records must be maintained for a minimum of 5 years following the day of such record.

Open Burning and Open Detonation (OB/OD)

The OB/OD operation involves the destruction and demilitarization of unserviceable munitions including: projectiles, rockets, warheads, powder propellants, ammunition, and pyrotechnics.

Emissions Standards:

These units are subject to no additional requirements other than those listed in the general provisos.

Expected Emissions:

The expected emissions are based on material balance and actual quantity burned or detonated.

Pollutant	lb/year	TPY
CO	62,235	31.1
PM	544,579	272
NO_x	2,768	1.38
SOx	192	0.096
VOC	24,600	12.30
HAPs	7,069	3.53

Periodic Monitoring:

No periodic monitoring is required for these units.

CAM

These sources are not subject to CAM since they do not have an emission limit.

Recordkeeping and Reporting:

These sources are subject to no additional specific requirements other than those listed in the General Permit Provisos.

Small Natural Gas Boilers - Appendix A

These boilers are classified as small natural gas boilers. These boilers burn primarily natural gas, but are allowed to burn fuel oil during periods of natural gas curtailment or gas emergencies. The following boilers fit this category:

Building/Boiler Number	Manufacturer	Rated Capacity (MMBtu/hr)
21	Burnham	1.51
27	Burnham	2.34
87	Hurst	0.86
100	Kewanee	1.35
118	Burnham	1.34
474-1	Unknown	2.51
474-2	Unknown	2.51
503	Hurst	2.68
695	Hurst	0.750

Emissions Standards:

Opacity Standards:

These units shall not discharge into the atmosphere particulates with an opacity greater than that designated as twenty percent (20%) opacity, as determined by a six (6) minute average. During one six (6) minute period in any sixty (60) minute period, the slitter/bailer may discharge into the atmosphere particulate emissions of an opacity no greater than that designated as forty percent (40%) opacity.

ADEM Admin. Code R. 334-3-4-.01(1).

.

Particulate Matter Emission Standards:

Particulate matter emissions from each boiler shall not exceed the allowable set by Rule 335-3-4-.03(1).

This section limits particulate matter emissions from fuel burning equipment. This is calculated using the fuel burning equipment equation:

$E = 1.38H^{-0.44}$
Where E = Emissions in pounds per million BTU
H = Heat Input in millions of BTU/hr

ADEM Admin. Code R. 335-3-4-.03-(1)

Emissions from the boiler would be expected to be well below the allowable emission rate since natural gas and No. 2 fuel oil would be the only fuel source

SO_2 Emission Standards:

These units shall burn natural gas and No. 2 fuel oil only during periods of gas curtailment or gas supply emergencies. The sulfur content of the No.2 fuel oil shall not exceed 0.5% by weight.

ADEM Admin. Code R. 335-3-14-.04

Emissions from the boiler would be expected to be well below the allowable emission rate since natural gas and No. 2 fuel oil would be the only fuel sources.

Expected Emissions:

The maximum expected emissions, based on AP-42 and operating 8760 hours per year, from the largest emissions source in the small natural gas boilers category (Building 503 – 2.68 MMBtu/hr) are as follows:

Pollutant	Potential Emissions (lb/hr)	Potential Emissions (TPY)
PM	0.02	0.09
$S0_2$	0.00	0.01
NO_x	0.26	1.15
CO	0.22	0.97
VOC	0.01	0.06

The maximum total expected emissions, based on AP-42 and operating 8760 hours per year, from all the small natural gas boilers are as follows:

Pollutant	Potential Emissions (lb/hr)	Potential Emissions (TPY)
PM	0.12	0.52
$S0_2$	0.01	0.04
NO_x	1.55	6.81
CO	1.31	5.72
VOC	0.09	0.37

Periodic Monitoring:

Based on the low level of expected emissions from these sources as compared to the regulatory allowable no periodic monitoring is required.

CAM

These sources are not subject to CAM since they do not have a control device.

Recordkeeping and Reporting:

These sources are subject to no additional specific requirements other than those listed in the General Permit Provisos.

Small Fuel Oil Boilers

These boilers are fuel oil boilers less than 10 MMBtu/hr. These boilers burn natural gas or No.2 fuel oil only. The following boilers fit this category:

Building/Boiler Number	Manufacturer	Rated Capacity (MMBtu/hr)
7	UNK	2.0
19-1	Burnham	8.4
19-2	Burnham	8.4
22	Burnham	0.77
49	Burnham	0.65
54	Burnham	1.06
58	Hurst	1.73
65	Superior	1.25
379	UNK	4.0
380	Burnham	1.29
414	Burnham	5.022
418	Burnham	1.73
600	UNK	1.0
647	Cleaver-Brooks	6.695
680	Hurst	4.185

Emissions Standards:

Opacity Standards:

This source shall not discharge more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%. Opacity will be determined by 40 CFR Part 60, Appendix A, Method 9, unless otherwise specified in the Unit Specific provisos of this permit.

ADEM Admin. Code R. 334-3-4-.01(1).

Particulate Matter Emission Standards:

Particulate matter emissions from each boiler shall not exceed the allowable set by Rule 335-3-4-.03(1).

This section limits particulate matter emissions from fuel burning equipment. This is calculated using the fuel burning equipment equation:

$E = 1.38H^{-0.44}$
Where E = Emissions in pounds per million BTU
H = Heat Input in millions of BTU/hr

ADEM Admin. Code R. 335-3-4-.03-(1)

Emissions from the boiler would be expected to be well below the allowable emission rate since natural gas and No. 2 fuel oil would be the only fuel sources.

Particulate matter emissions from the Building 19 Boilers Nos. 1 & 2 shall not exceed 0.13 lbs/hr, each.

ADEM Admin. Code R. 335-3-14-.04

SO_2 Emission Standards:

These units shall burn natural gas and No. 2 fuel oil only. Building 680 (4.185 MMBtu/hr) Boiler shall burn natural gas, propane, and No.2 fuel oil only. The fuel oil combusted by these units shall have a sulfur content of 0.5 % by weight or less.

ADEM Admin. Code R. 335-3-14-.04

Sulfur Dioxide emissions from each boiler shall not exceed the allowable set by Rule 335-3-5-.01.

This section limits sulfur dioxide emissions from fuel burning equipment to 4.0 pounds per million BTU of heat input, for Category II counties.

ADEM Admin. Code R. 335-3-5-.01(1)(b)

Emissions from the boiler would be expected to be well below the allowable emission rate set by Rule 335-3-5-.01(1)(b) since natural gas and No. 2 fuel oil would be the only fuel sources.

Expected Emissions:

The maximum expected emissions, based on AP-42 and operating 8760 hours per year, from the largest emissions source in the small fuel oil boilers category (Building 19-1 – 8.40 MMBtu/hr) are as follows:

Pollutant	**Potential Emissions (lb/hr)**	**Potential Emissions (TPY)**
PM	0.12	0.53
$S0_2$	4.27	18.71
NO_x	1.20	5.27
CO	0.30	1.32
VOC	0.03	0.15

The maximum total expected emissions, based on AP-42 and operating 8760 hours per year, from all the small fuel oil boilers are as follows:

Pollutant	Potential Emissions (lb/hr)	Potential Emissions (TPY)
PM	0.69	3.02
$S0_2$	24.51	107.33
NO_x	6.90	30.23
CO	1.73	7.56
VOC	0.19	0.84

Periodic Monitoring for Buildings 19, 414,647, & 680 Fuel Oil Boilers:

Periodic inspections of these units shall be performed once every year to include inspections of tubes, burners, and control valves, to ensure the boilers operate as designed.

ADEM Admin. Code R. 335-3-16-.05(c)

As an indicator of compliance with the particulate and opacity emission limits, when the units are burning fuels other than natural gas, daily visual observations of the stacks shall be conducted by personnel familiar with Method 9 of 40 CFR Part 60, Appendix A. If any visible emissions are observed, personnel certified in accordance with Method 9 of 40 CFR Part 60, Appendix A shall observe the emissions within two hours of the initial observation. If the certified observer determines the emissions have opacity of 10% or greater as determined by Method 9 of 40 CFR 60, Appendix A, the facility shall investigate and initiate any necessary corrective actions within 4 hours. After any corrective actions, an additional observation by personnel certified in accordance with Method 9 of 40 CFR 60, Appendix A shall be performed in order to verify that visible emissions have been reduced.

A visual emissions observation is not required on days the units are either not in operation or burn only natural gas.

ADEM Admin. Code R. 335-3-16-.05(c)

To demonstrate compliance with the fuel oil sulfur content limit is maintained, the Permittee shall either:

(a) obtain a certification from the fuel supplier consisting of the name of the oil supplier and a statement from the supplier that the oil complies with the specifications under the definition of distillate oil, or

(b) Collect oil samples from the fuel tank for each boiler immediately after the fuel tank is filled and before any oil is combusted. The permittee shall analyze the oil sample to determine the sulfur content of the oil in accordance with procedures found in ASTM D 129-64. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank will be required upon filling. Results of the fuel analysis taken

after each new oil shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average of fuel oil sulfur content until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the permittee shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.

ADEM Admin. Code R. 335-3-16-.05(c)

Based on the low level of expected emissions, Boilers 22, 49, 54, 58, 65, 380, and 418 have no additional requirements other than those in the General Provisos.

N/A

CAM

These sources are not subject to CAM since they do not have a control device.

Recordkeeping and Reporting for Buildings 19, 414,647, & 680 Fuel Oil Boilers:

Records of the required daily visual inspections shall be maintained and should be readily available for inspection for a period of five years. These records shall include the date and results of the visual inspections. If any visible emissions are observed, the records shall include the date and time of the initial observation, and the date, time, and results of the Method 9 observation performed by personnel certified in accordance with Method 9 of 40 CFR 60, Appendix A. If corrective action is warranted, the records shall include a description of the corrective actions taken, the date and time of the initial corrective action attempt, and the results of the follow-up visual inspection.

During days that these sources are not in operation, or during days these units burn only natural gas, and a daily visible observation is not required, it shall be recorded that the source was either not in operation or burned only natural gas.

ADEM Admin. Code R. 335-3-16-.05(c)

Records of boiler inspections and maintenance performed shall be maintained for a period of no less than 5 years following the date of generation.

ADEM Admin. Code R. 335-3-16-.05(c)

The fuel oil supplier certifications and the results of the fuel oil sulfur content testing shall be maintained for a period of no less than five years following the date of generation.

ADEM Admin. Code R. 335-3-16-.05(c)

Based on the low level of expected emissions, Boilers 22, 49, 54, 58, 65, 380, and 418 have no additional requirements other than those in the General Provisos.

N/A

Large Fuel Oil Boilers

These boilers are classified as large fuel oil boilers; because each boiler has a rated capacity greater than or equal to 10 MMBtu/hr heat input and burns natural gas or No. 2 fuel oil only. The following boilers fit this category:

Large Fuel Oil Boilers

Building Number/Emission Point	Source Type	Manufacturer	Model Number	Rated Capacity	Installed
				MMBtu/hr	
B0362-1	Boiler	Burnham	3P-300	12.42	1998
B0362-2	Boiler	Burnham	3P-300	12.42	1998
B0381A-1	Boiler	Hurst	National Board # 3518	21.00	1997
B0381A-2	Boiler	Hurst	National Board # 3517	21.00	1997
B0401-1	Boiler	Nebraska	NS-ES-76-ECON	90.00	1999
B0401-2	Boiler	Nebraska	NS-ES-76-ECON	90.00	1999
B0401-3	Boiler	Cleaver Brooks	W3462	61.50	1989
B0501-1		Kewanee	Boiler - L3S60002 Burner - HPGA02-B15V	20.085	1985

NSPS

These boilers are subject to the applicable requirements of 40 CFR Part 60 Subpart Dc, "Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units" with the following exception. Boilers B0401-3 and B0501-1 are not subject to this subpart because these boilers were installed prior to June 1989.

Emissions Standards:

Opacity Standards:

All Large Fuel Oil Boilers

This source shall not discharge more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%. Opacity will be determined by 40 CFR Part 60, Appendix A, Method 9, unless otherwise specified in the Unit Specific provisos of this permit.

ADEM Admin. Code R. 334-3-4-.01(1).

Boilers B0401-1 and B0401-2

Emissions from each unit shall not exhibit opacity greater than 20% as determined by a six minute average, except for one six minute period per hour of not more than 27% opacity.

ADEM Admin. Code R 335-3-10-.02(2)(c) (§60.42c(c) NSPS)

Particulate Matter Emission Standards:

All Large Fuel Oil Boilers

Particulate matter emissions from each boiler shall not exceed the allowable set by Rule 335-3-4-.03(1).

This section limits particulate matter emissions from fuel burning equipment. This is calculated using the fuel burning equipment equation:

$E = 1.38H^{-0.44}$
Where E = Emissions in pounds per million BTU
H = Heat Input in millions of BTU/hr

ADEM Admin. Code R. 335-3-4-.03-(1)

Emissions from the boiler would be expected to be well below the allowable emission rate since natural gas and No. 2 fuel oil would be the only fuel sources.

Boilers B0362-1 and B0362-2

Particulate Matter Emissions from each boiler shall not exceed 0.17 lbs/hr.

ADEM Admin. Code R. 335-3-14-.04

Boilers B0381A-1 and B0381A-2

Particulate Matter Emissions from each boiler shall not exceed 1.59 lbs/hr.

ADEM Admin. Code R. 335-3-14-.04

Boilers B0401-1 and B0401-2

Particulate Matter Emissions from each boiler shall not exceed 1.29 lbs/hr.

ADEM Admin. Code R. 335-3-14-.04

SO_2 Emission Standards:

All Large Fuel Oil Boilers

These units shall burn only natural gas and No. 2 fuel oil only. The sulfur content of the No.2 fuel oil shall not exceed 0.5% by weight.

ADEM Admin. Code R 335-3-10-.02(2)(c) (§60.42c(d) NSPS)

and

ADEM Admin. Code R. 335-3-14-.04

Sulfur Dioxide emissions from each boiler shall not exceed the allowable set by Rule 335-3-5-.01.

This section limits sulfur dioxide emissions from fuel burning equipment to 4.0 pounds per million BTU of heat input, for Category II counties.

ADEM Admin. Code R. 335-3-5-.01(1)(b)

Emissions from the boiler would be expected to be well below the allowable emission rate set by Rule 335-3-5-.01(1)(b) since natural gas and No. 2 fuel oil would be the only fuel sources.

All Pollutants

Boilers B0362-1 and B0362-2

These boilers shall consume no more than a total of 1,086,905 gallons of No. 2 fuel oil in any consecutive 12-month period.

ADEM Admin. Code R. 335-3-14-.04

Boilers B0381A-1 and B0381A-2

These boilers shall consume no more than a total of 1,067,761 gallons of No. 2 fuel oil in any consecutive 12-month period.

ADEM Admin. Code R. 335-3-14-.04

Boilers B0401-1 and B0401-2

These boilers shall consume no more than a total of 9,944,000 gallons of No. 2 fuel oil in any consecutive 12-month period.

ADEM Admin. Code R. 335-3-14-.04

Boilers B0401-3

This boiler shall consume no more than a total of 1,054,000 gallons of No. 2 fuel oil in any consecutive 12-month period.

ADEM Admin. Code R. 335-3-14-.04

This boiler shall consume no more than a total of 272,142,857 standard cubic feet of natural gas in any consecutive 12-month period.

ADEM Admin. Code R. 335-3-14-.04

Boilers B0501-1

This boiler shall consume no more than a total of 1,098,592 gallons of No. 2 fuel oil in any consecutive 12-month period.

ADEM Admin. Code R. 335-3-14-.04

Expected Emissions:

The maximum expected emissions, based on AP-42 emission factors and operating 8760 hours per year, from the largest emissions source in the large fuel oil boilers category (Building B0401-1– 90.00 MMBtu/hr) are as follows:

Pollutant	Potential Emissions (lb/hr)	Potential Emissions (TPY)
PM	1.29	5.65
$S0_2$	45.77	200.49
NO_x	12.89	56.48
CO	7.41	32.46
VOC	0.49	2.13

The maximum total expected emissions, based on AP-42 emission factors and annual fuel usage limits, from all large fuel oil boilers are as follows:

Pollutant	Potential Emissions (lb/hr)	Potential Emissions (TPY)
PM	4.71	14.25
$S0_2$	167.04	505.92
NO_x	47.05	142.51
CO	11.76	118.46
VOC	1.31	7.76

Periodic Monitoring:

Periodic inspections of these units shall be performed once every year to include inspections of tubes, burners, and control valves, to ensure the boilers operate as designed.

ADEM Admin. Code R. 335-3-16-.05(c)

As an indicator of compliance with the particulate and opacity emission limits, when the units are burning fuels other than natural gas, daily visual observations of the stacks shall be conducted by personnel familiar with Method 9 of 40 CFR Part 60, Appendix A. If any visible emissions are observed, personnel certified in accordance with Method 9 of 40 CFR Part 60, Appendix A shall observe the emissions within two hours of the initial

observation. If the certified observer determines the emissions have opacity of 10% or greater as determined by Method 9 of 40 CFR 60, Appendix A, the facility shall investigate and initiate any necessary corrective actions within 4 hours. After any corrective actions, an additional observation by personnel certified in accordance with Method 9 of 40 CFR 60, Appendix A shall be performed in order to verify that visible emissions have been reduced.

A visual emissions observation is not required on days the units are either not in operation or burn only natural gas.

ADEM Admin. Code R. 335-3-16-.05(c)

To demonstrate compliance with the fuel oil sulfur content limit is maintained, the Permittee shall either:

(a) obtain a certification from the fuel supplier consisting of the name of the oil supplier and a statement from the supplier that the oil complies with the specifications under the definition of distillate oil, or

(b) Collect oil samples from the fuel tank for each boiler immediately after the fuel tank is filled and before any oil is combusted. The permittee shall analyze the oil sample to determine the sulfur content of the oil in accordance with procedures found in ASTM D 129-64. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank will be required upon filling. Results of the fuel analysis taken after each new oil shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average of fuel oil sulfur content until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the permittee shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.

ADEM Admin. Code R. 335-3-16-.05(c)

CAM

These sources are not subject to CAM since they do not have a control.

Recordkeeping and Reporting:

All Large Fuel Oil Boilers

Records of daily, monthly, and rolling twelve-month fuel oil usage shall be maintained in a form suitable for inspection for a period of at least 5 years following the use of the fuel oil.

ADEM Admin. Code R. 335-3-16-.05(c)

Records of boiler inspections and maintenance performed shall be maintained for a period of no less than 5 years following the date of generation.

ADEM Admin. Code R. 335-3-16-.05(c)

Records of the required daily visual inspections shall be maintained and should be readily available for inspection for a period of five years. These records shall include the date and results of the visual inspections. If any visible emissions are observed, the records shall include the date and time of the initial observation, and the date, time, and results of the Method 9 observation performed by personnel certified in accordance with Method 9 of 40 CFR 60, Appendix A. If corrective action is warranted, the records shall include a description of the corrective actions taken, the date and time of the initial corrective action attempt, and the results of the follow-up visual inspection.

During days that these sources are not in operation, or during days these units burn only natural gas, and a daily visible observation is not required, it shall be recorded that the source was either not in operation or burned only natural gas.

ADEM Admin. Code R. 335-3-16-.05(c)

NSPS Reporting/Recordkeeping

The amount of fuel combusted each day in each unit shall be recorded. These records shall be maintained in a form suitable for inspection for a period of at least 5 years following the date of generation of the record.

ADEM Admin. Code R 335-3-10-.02(2)(c) (§60.48c(g) NSPS)

Quarterly reports concerning boiler operations shall be submitted to the Department. Each quarterly report shall be postmarked by the 30th day following the end of the reporting period, and shall contain the information described below.

(a) If fuel oil supplier certifications are being used to demonstrate compliance with the fuel oil sulfur content limit, the quarterly reports shall include the calendar dates covered in the reporting period, the name of the oil supplier, and a statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in § 60.41c. In addition, the quarterly reports shall include a certified statement signed by the owner or operator of the units that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.

(b) If the Permittee collects oil samples to demonstrate compliance with the fuel oil sulfur content limit, the quarterly reports shall include the calendar dates covered in the reporting period, and each 30-day average sulfur content (weight percent), calculated during the reporting period (ending with the last 30-day period).

ADEM Admin. Code R 335-3-10-.02(2)(c) (§60.48c(d-e) NSPS)

Salt Bath Cleaning System with common Scrubber (X045)

The salt bath system includes two molten salt baths and three rinse tanks vented to a common scrubber. The system is used depaint and clean engine parts at the powertrain rebuild and testing facility (Building 474). The salt baths are heated by ten 0.25 MMBtu/hr natural gas burners. The rinse tanks are heated by six 0.5 MMBtu/hr burners.

Emissions Standards:

Opacity Standards:

This source shall not discharge more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%. Opacity will be determined by 40 CFR Part 60, Appendix A, Method 9, unless otherwise specified in the Unit Specific provisos of this permit.

ADEM Admin. Code R. 334-3-4-.01(1).

Particulate Matter Emission Standards:

Particulate Matter Emissions from the salt bath system shall not exceed 1.40 lbs/hr.

ADEM Admin. Code R. 335-3-14-.04

Expected Emissions:
The expected emissions from natural gas combustion were calculated based on AP-42 emission factors and annual operation of 8760 days per year. The salt bath emissions were based on material balance and particulate matter emission control efficiency of 90%.

	Natural Gas Combustion		**Salt Baths**	
Pollutant	**Potential Emissions (lb/hr)**	**Limited Potential Emissions (TPY)**	**Potential Emissions (lb/hr)**	**Potential Emissions (TPY)**
PM	0.04	0.18	0.7	3.06
S02	0.00	0.01		
NOx	0.54	2.36		
CO	0.45	1.98		
VOC	0.03	0.13		

Periodic Monitoring:

Weekly visual observations of the stack (while the unit is in operation) shall be conducted by personnel familiar with Method 9 of 40 CFR Part 60, Appendix A. If any visible emissions are observed, personnel certified in accordance with Method 9 of 40 CFR Part 60, Appendix A shall observe the emissions within two hours of the initial observation. If the observer certified in accordance with Method 9 of 40 CFR Part 60, Appendix A determines the emissions have opacity of 10% or greater as determined by Method 9 of

40 CFR 60, Appendix A, the facility shall investigate and initiate any necessary corrective actions within 4 hours. After any corrective actions, an additional observation by personnel certified in accordance with Method 9 of 40 CFR 60, Appendix A shall be performed in order to verify that visible emissions have been reduced to less than 10% opacity.

In the event that a week goes by without the operation of this source, a weekly visual inspection shall not be required.

ADEM Admin. Code R. 335-3-16-.05(c)

CAM

These sources are not subject to CAM since the uncontrolled potential emissions would be less than 100 TPY.

Recordkeeping and Reporting:

Records of the required weekly visual inspections shall be maintained and should be readily available for inspection for a period of five years. These records shall include the date and results of the visual inspections. If any visible emissions are observed, the records shall include the date and time of the initial observation, and the date, time, and results of the Method 9 observation performed by personnel certified in accordance with Method 9 of 40 CFR Part 60, Appendix A. If corrective action is warranted, the records shall include a description of the corrective action taken, the date and time of the initial corrective action attempt, and the results of the follow-up visual inspection.

During weeks that this source is not in operation and a weekly visible observation is not required, it shall be recorded that the source was not in operation.

ADEM Admin. Code R. 335-3-16-.05(c)

NPX Vats

ANAD operates six NPX vats, two in Building 409, one in Building 474 (X039), one in Building 114, and two in Building 130. The vats contain a methylene chloride and formic acid solution used to remove paint from miscellaneous engine parts and components.

112(g)

The Building 130 NPX vats 10 and 12 are subject to the applicable requirements of ADEM Admin. Code R. 335-3-14-.06, "Requirements for Control Technology [Determination for Major Sources in Accordance with Clean Air Act Section 112(g)."

Emissions Standards:

Building 114 and Building 409 NPX vats

The Building 114 and Building 409 NPX vats are subject to no additional emissions standards other than those in the General Provisos.

N/A

Building 130 NPX vats

Each vat shall be equipped with a tightly fitting cover that shall be closed at all times, except when parts are inserted, removed and vat servicing/maintenance is performed. The fill line shall be set to where there will be a freeboard ratio of 0.75 or greater. The freeboard ratio shall be calculated by determining the ratio between the freeboard height (the distance from the vat liquid level, as measured when no parts are submerged, to the top of the machine) to the smaller interior dimension (length, width, or diameter) of the vat.

ADEM Admin. Code R. 335-3-16-.06

The following work practice standards shall be adhered to:

(a) Collect waste solvent and store it in closed containers
(b) Flush parts only within the freeboard area
(c) Drain parts for 15 seconds
(d) Do not overfill the tank
(e) Wipe up spills with rags and store them in a covered container
(f) Control agitation in the tank with no splashing
(g) When the vat cover is open, prevent room drafts greater than 132 feet per minute. Measure room drafts between 3.3 and 6.6 feet upwind and at the same elevation as the vat lip.
(h) Do not clean sponges, fabric, wood or paper products

Vat operators shall be properly trained on the above work practice standards.

ADEM Admin. Code R. 335-3-16-.06

Building 474 NPX vat

This vat shall be equipped with a tightly fitting cover that shall be closed at all times, except when parts are inserted, removed and vat servicing/maintenance is performed.

ADEM Admin. Code R. 335-3-14-.01(g)

Expected Emissions:
The expected emissions from the NPX Vats are based on material balance and the expected hours of operation.

	Methylene Chloride	
Building – Vat No.	**lb/hr**	**TPY**
114 – 120	8.28	34.79
130 – 10	3.08	13.4
130 – 12	3.08	13.4
409 – Vat 9	4.23	18.52
409 – 2200 gallon Vat	4.23	18.52
474 – X039	1.71	7.5

Periodic Monitoring:

Building 114 and Building 409 NPX vats

The Building 114 and Building 409 NPX vats are subject to no additional monitoring requirements other than those in the General Provisos.

N/A

Building 130 NPX vats

The Permittee shall perform weekly inspections to verify that the cleaning solvent level is at or below the fill line.

The Permittee shall perform weekly inspections to verify that the vat covers fit tightly and close properly.

ADEM Admin. Code R. 335-3-16-.05(c)

Building 474 NPX vat

The Permittee shall perform weekly inspections to verify that the vat covers fit tightly and close properly.

ADEM Admin. Code R. 335-3-16-.05(c)

Recordkeeping and Reporting:

Building 114 and Building 409 NPX vats

The Building 114 and Building 409 NPX vats are subject to no additional recordkeeping or reporting requirements other than those in the General Provisos.

Building 130 NPX vats

The Permittee shall maintain a record of vat operator training and all weekly inspections, and shall maintain these records in a form suitable for inspections for a period of 5 years.

ADEM Admin. Code R. 335-3-16-.05(c)

Building 474 NPX vat

The Permittee shall maintain a record of the weekly inspections, and shall maintain these records in a form suitable for inspections for a period of 5 years.

ADEM Admin. Code R. 335-3-16-.05(c)

Vapor Degreasing

ANAD operates three vapor degreasing units for degreasing various military components. The units in Buildings 129 and 409 utilize a trichloroethylene solvent. The Building 128 Degreaser utilizes ENSOLV (non-HAP).

MACT

The Buildings 129 and 409 TCE Vapor Degreasers are subject to the applicable requirements of 40 CFR 63 Subpart T- "National Emission Standards for Halogenated Solvent Cleaning".

Emissions Standards:

Building 128

The solvent used in this unit shall contain no Hazardous Air Pollutants, as defined in ADEM Admin. Code R. 335-3, Appendix G.

ADEM Admin. Code R 335-3-11-.06

Buildings 129 and 409

This source shall meet the emission limitations and/or work practice standards as stated in 40 CFR 63.463 or 40 CFR 63.464.

ADEM Admin. Code R 335-3-11-.06(19) (§63.463 & §63.464 MACT)

Facility-wide emissions of Trichloroethylene (TCE) shall not exceed 23,500 kg in any consecutive rolling 12-month period based on the procedures in 40 CFR 63.471(c).

40 CFR Subpart T §63.471(b) MACT

Each Batch Vapor Degreaser shall conform to the following design requirements:

(a) Each cleaning machine shall be designed or operated with either an idling and downtime mode cover, as described in 40 CFR 63.463(d)(1)(i), that may be readily opened or closed, that completely covers the cleaning machine openings when in place, and is free of cracks, holes, and other defects, or a reduced room draft as described in 40 CFR 63.463(e)(2)(ii).
(b) Each cleaning machine shall have a freeboard ratio of 0.75 or greater.
(c) Each cleaning machine shall have an automated parts handling system capable of moving parts or parts baskets at a speed of 3.4 meters per minute (11 feet per minute) or less from the initial loading of parts through
(d) Each vapor cleaning machine shall be equipped with a device that shuts off the sump heat if the sump liquid solvent level drops to the sump heater coils. This requirement does not apply to a vapor cleaning machine that uses steam to heat the solvent.
(e) Each vapor cleaning machine shall be equipped with a vapor level control device that shuts off sump heat if the vapor level in the vapor cleaning machine rises above the height of the primary condenser.
(f) Each vapor cleaning machine shall have a primary condenser.

(g) Each cleaning machine that uses a lip exhaust shall be designed and operated to route all collected solvent vapors through a properly operated and maintained carbon adsorber that meets the requirements of 40 CFR 63.463(e)(2)(vii). removal of cleaned parts.

40 CFR Subpart T §63.471(b) MACT

The Permittee shall either employ one of the control combinations listed in Table 2 of 40 CFR 63.463(b)(2)(i) or demonstrate that their solvent cleaning machine can achieve and maintain an idling emission limit of 0.22 kilograms per hour per square meter of solvent/air interface area as determined using the procedures in 40 CFR 63.465(a) and appendix A of 40 CFR 63.

40 CFR Subpart T §63.463(b)(2)

The Permittee shall meet all of the required work and operational practices specified in 40 CFR 63.463(d)(1) – (12) as applicable.

40 CFR Subpart T §63.463(d)

The Permittee shall determine during each monitoring period whether each control device used to comply with the applicable emission standards meets the requirements specified in 40 CFR 63.463(e)(2)(i) – (xi).

If any of the requirements specified in 40 CFR 63.463(e)(2)(i) – (xi) are not met, the Permittee shall determine whether an exceedance has occurred using the criteria in 40 CFR 63.463(e)(3)(i) – (ii), and report all exceedances and corrections made to avoid an exceedance as specified in 40 CFR 63.468(h).

40 CFR Subpart T §63.463(e)

The Permittee complying with the idling emission limit standard in 40 CFR 63.463 shall comply with the requirements in 40 CFR 63.463(f)(1)-(5).

40 CFR Subpart T §63.463(f)

Expected Emissions:

VOC Emissions:

Building 128

The expected VOC emissions are 2.03 lbs/hr (2.12 TPY) from Building 128 Vapor Degreaser. This is based on material balance and the expected hours of operation.

TCE (a VOC-HAP) Emissions:

Buildings 129 and 409

The expected TCE emissions are 4.27 lbs/hr (4.33 TPY) from Building 129 Batch Vapor Degreaser and 36.48 lbs/hr (36.94 TPY) from Building 409 Batch Vapor Degreaser. This is based on material balance and the expected hours of operation.

Periodic Monitoring:

Building 128

The Building 128 Vapor Degreaser is subject to no additional monitoring requirements other than those in the General Provisos.

N/A

Buildings 129 and 409

Emission monitoring for this unit shall consist of the monitoring required by 40 CFR 63.463 and 40 CFR 63.466

ADEM Admin. Code R 335-3-11-.06(19) (§63.463 & §63.466 MACT)

The Permittee complying with the equipment standards in 40 CFR 63.463 shall conduct the following monitoring on a weekly basis, as appropriate:

(a) If a freeboard refrigeration device is used to comply with these standards, the owner or operator shall use a thermometer or thermocouple to measure the temperature at the center of the air blanket during the idling mode

(b) If a superheated vapor system is used to comply with these standards, the owner or operator shall use a thermometer or thermocouple to measure the temperature at the center of the superheated solvent vapor zone while the solvent cleaning machine is in the idling mode.

(c) If a squeegee system, air knife system, or combination squeegee and air knife system is used to comply with the requirements of 40 CFR 63.463(g) or (h), the owner or operator shall visually inspect the continuous web part exiting the solvent cleaning machine to ensure that no solvent film is visible on the part.

(d) Except as provided in 40 CFR 63.466(a)(5), if a superheated part system is used to comply with the requirements of 40 CFR 63.463(g) or (h), the owner or operator shall use a thermometer, thermocouple, or other temperature measurement device to measure the temperature of the continuous web part while it is in the solvent cleaning machine. This measurement can also be taken at the exit of the solvent cleaning machine.

(e) As an alternative to complying 40 CFR 63.466(a)(4), the owner or operator can provide data, sufficient to satisfy the Administrator, that demonstrate that the part temperature remains above the boiling point of the solvent at all times that the part is within the continuous web solvent cleaning machine. This data could

include design and operating conditions such as information supporting any exothermic reaction inherent in the processing.

40 CFR Subpart T §63.466(a)

If a cover (working-mode, downtime-mode, and/or idling-mode cover) is used to comply with the equipment standards in 40 CFR 63.463, the owner or operator shall conduct a visual inspection to determine if the cover is opening and closing properly, completely covers the cleaning machine openings when closed, and is free of cracks, holes, and other defects.

40 CFR Subpart T §63.466(b)(1)

The Permittee complying with the equipment or idling standards in 40 CFR 63.463 shall monitor the hoist speed as described in the following paragraphs:

(a) The owner or operator shall determine the hoist speed by measuring the time it takes for the hoist to travel a measured distance. The speed is equal to the distance in meters divided by the time in minutes (meters per minute).
(b) The monitoring shall be conducted monthly. If after the first year, no exceedances of the hoist speed are measured, the owner or operator may begin monitoring the hoist speed quarterly.
(c) If an exceedance of the hoist speed occurs during quarterly monitoring, the monitoring frequency returns to monthly until another year of compliance without an exceedance is demonstrated.
(d) If an owner or operator can demonstrate to the Administrator's satisfaction in the initial compliance report that the hoist cannot exceed a speed of 3.4 meters per minute (11 feet per minute), the required monitoring frequency is quarterly, including during the first year of compliance.

40 CFR Subpart T §63.466(c)

The Permittee complying with the equipment standards in 40 CFR 63.463 using a reduced room draft shall conduct the following monitoring, as appropriate:

If an enclosure (full or partial) is used to achieve a reduced room draft, the owner or operator shall conduct an initial monitoring test and, thereafter, monthly monitoring tests of the windspeed within the enclosure using the procedure specified in 40 CFR 63.466(d)(2)(i) and (d)(2)(ii) of this section and a monthly visual inspection of the enclosure to determine if it is free of cracks, holes and other defects.

40 CFR Subpart T §63.466(d)

The facility must maintain a log of solvent additions and deletions for each solvent cleaning machine.

40 CFR Subpart T §63.471(b)(1)

Recordkeeping and Reporting:

Building 128

The Building 128 Vapor Degreaser is subject to no additional recordkeeping and reporting requirements other than those in the General Provisos.

N/A

Buildings 129 and 409

Recordkeeping and reporting requirements for this unit shall be the recordkeeping and reporting required by 40 CFR 63.467 and 40 CFR 63.468

ADEM Admin. Code R 335-3-11-.06(19) (§63.467 & §63.468 MACT)

The Permittee shall submit an initial notification no later than May 3, 2010. This report shall include the information specified in paragraphs 40 CFR 63.471(f)(1)-(5).

40 CFR Subpart T §63.471(f)

The Permittee complying with the provisions in 40 CFR 63.463 shall maintain the following records in written or electronic form for the lifetime of the machine:

(a) Owner's manuals, or if not available, written maintenance and operating procedures, for the solvent cleaning machine and control equipment.
(b) The date of installation for the solvent cleaning machine and all of its control devices. If the exact date for installation is not known, a letter certifying that the cleaning machine and its control devices were installed prior to, or on, November 29, 1993, or after November 29, 1993, may be substituted.
(c) If a dwell is used to comply with these standards, records of the tests required in 40 CFR 63.465(d) to determine an appropriate dwell time for each part or parts basket.
(d) Each owner or operator of a batch vapor or in-line solvent cleaning machine complying with the idling emission limit standards of 40 CFR 63.463 shall maintain records of the initial performance test, including the idling emission rate and values of the monitoring parameters measured during the test.
(e) Records of the halogenated HAP solvent content for each solvent used in a solvent cleaning machine subject to the provisions of 40 CFR Part 63 Subpart T.

40 CFR Subpart T §63.467(a)

The Permittee complying with the provisions in 40 CFR 63.463 shall maintain the following records in written or electronic format for a period of five years:

(a) The results of control device monitoring required under 40 CFR 63.466
(b) Information on the actions taken to comply with 40 CFR 63.463(e) and (f). This information shall include records of written or verbal orders for

replacement parts, a description of the repairs made, and additional monitoring conducted to demonstrate that monitored parameters have returned to accepted levels.

(c) Estimates of annual solvent consumption for each solvent cleaning machine.

40 CFR Subpart T §63.467(b)

The Permittee shall maintain shall maintain the following records in written or electronic format for a period of five years:

(a) The dates and amounts of solvent that are added to each solvent cleaning machine.
(b) The solvent composition of wastes removed from each solvent cleaning machines as determined using the procedure described in paragraph 40 CFR 63.471(c)(3).
(c) Calculation sheets showing how monthly emissions and the 12-month rolling total emissions from each solvent cleaning machine were determined, and the results of all calculations.

40 CFR Subpart T §63.471(e)

The Permittee shall submit a solvent emission report every year. This report shall include the following:

(a) The average monthly solvent consumption for the affected facility in kilograms per month.
(b) The 12-month rolling total solvent emission estimates calculated each month using the method as described in 40 CFR 63.471(c).

This report can be combined with the annual report required in 40 CFR 63.468(f) and (g) into a single report for each facility.

40 CFR Subpart T §63.471(h)

The Permittee complying with the provisions in 40 CFR 63.463 shall submit an annual report by February 1 of the year following the one for which the reporting is being made. This report shall include the following:

(a) A signed statement from the facility owner or his designee stating that, "All operators of solvent cleaning machines have received training on the proper operation of solvent cleaning machines and their control devices sufficient to pass the test required in 40 CFR 63.463(d)(10)."
(b) An estimate of solvent consumption for each solvent cleaning machine during the reporting period.

40 CFR Subpart T §63.468(f)

The Permittee shall submit an exceedance report to the Department semiannually except when, the Department determines on a case-by-case basis that more frequent reporting is necessary to accurately assess the compliance status of the source or, an exceedance occurs. Once an exceedance has occurred the Permittee shall follow a quarterly reporting. Exceedance reports shall be delivered or postmarked by the 30th day following the end of each calendar half or quarter, as appropriate. The exceedance report shall include the following applicable information:

(a) Information on the actions taken to comply with 40 CFR 63.463 (e) and (f). This information shall include records of written or verbal orders for replacement parts, a description of the repairs made, and additional monitoring conducted to demonstrate that monitored parameters have returned to accepted levels.
(b) If an exceedance has occurred, the reason for the exceedance and a description of the actions taken.
(c) If no exceedances of a parameter have occurred, or a piece of equipment has not been inoperative, out of control, repaired, or adjusted, such information shall be stated in the report.

40 CFR Subpart T §63.468(h)

Emergency Generator

ANAD operates a 364 hp diesel fired emergency generator located in Building 445. This generator is used to provide back-up emergency power and operates less than 500 hours per year.

NSPS

This unit is subject to the applicable portions of 40 CFR 60 Subpart IIII- Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

Emissions Standards:

NSPS IIII Standards:

This unit must be installed and configured according to the manufacturer's specifications.

40 CFR Part 60 Subpart IIII §60.4211(c)

The owner or operator of this unit must install a non-resettable hour meter prior to startup of the engine.

40 CFR Part 60 Subpart IIII §60.4209(b)

This unit must use diesel fuel that meets the requirements of 40 CFR 80.510(a).

40 CFR Part 60 Subpart IIII §60.4207(a)

Beginning October 1, 2010, this unit must use diesel fuel that meets the requirements of 40 CFR 80.510(b).

40 CFR Part 60 Subpart IIII §60.4207 (b)
The facility must operate and maintain this unit according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine.

40 CFR Part 60 Subpart IIII §60.4206

Any operation of these units, other that emergency operation, maintenance, and testing, is prohibited. Maintenance checks and readiness testing is limited to 100 hours per year.

40 CFR Part 60 Subpart IIII §60.4211(e)

Expected Emissions:

The expected emissions are based on AP-42 emission factors and a maximum operation of 500 hours per year.

Pollutant	**Emission Factor**	**Source**	**Potential Emissions**	
Units	lb/hp-hr		lb/hr	TPY
PM	2.20E-03	AP-42 Table 3.3-1	0.80	0.20
$S0_2$	2.05E-03	AP-42 Table 3.3-1	0.75	0.19
NO_x	0.031	AP-42 Table 3.3-1	11.28	2.82
CO	6.68E-03	AP-42 Table 3.3-1	2.43	0.61
VOC	2.50E-03	AP-42 Table 3.3-1	0.91	0.23

Periodic Monitoring:

Based on the low level of expected emissions from these sources no periodic monitoring is required.

CAM

These sources are not subject to CAM since they do not have a control device.

Recordkeeping and Reporting:

These sources are subject to no additional specific requirements other than those listed in the General Permit Provisos.

Recommendation

Based on the above analysis and pending the resolution of any comments received during the 30-day public comment period and 45 day EPA review, I recommend issuing Anniston Army Depot's Title V MSOP renewal.

_____
Charles Killebrew
Industrial Minerals Sections
Energy Branch
Air Division

February 17, 2009
Date